

# Fifth Disease

Fifth disease is an illness caused by a virus called *human parvovirus B19*. Although people may be asymptomatic with the illness, most children with it develop a facial rash (i.e., "slapped cheek" appearance) and a lace-like rash on the trunk and extremities. The rash may reappear for several weeks following exposure to non-specific stimuli such as sunlight, change in temperature or emotional stress.

Except for the rash, the patient is typically otherwise well: but some give a history of mild general symptoms one to four days before rash onset. Fever, sore throat or pain and swelling in the joints may also occur.

## Who gets this disease?

Although most commonly recognized in children, anyone is susceptible. Studies indicate previous infection with Fifth Disease correlates with a lower risk of a second infection. Outbreaks in schools often begin in late winter or early spring and may continue until the school year is over.

In the U.S. about 50% of the adult population are already immune to this disease. Some studies indicate the pregnant women who are exposed to Fifth Disease and subsequently develop infection may have an increased risk for fetal death. However, this risk is felt to be extremely low. There is no evidence that that infection during pregnancy causes fetal malformations (i.e., birth defects). Pregnant child care workers should contact their obstetricians.

## How is it spread?

The virus that causes Fifth Disease has been found in the respiratory secretions of patients and is, therefore, most likely spread by direct person-to-person contact through the respiratory route.

## How soon do symptoms appear?

It takes from 4-21 days after exposure to develop the characteristic rash illness of Fifth Disease. People with the rash are past the period of infectiousness to others. The highest risk of transmitting the Fifth Disease virus to others is felt to occur **before** the rash develops.

## **How is it diagnosed and treated?**

A healthcare provider based on the characteristic rash and any other accompanying symptoms may diagnose Fifth Disease. There is no specific treatment for Fifth Disease.

## **How can the spread of this disease be prevented?**

1. Because transmission of the Fifth Disease virus usually occurs before the rash develops - when a child may seem well or has a non-specific illness - excluding children with the Fifth Disease rash is of no proven value. However, **it is very important** for a healthcare provider to rule out other rash-causing illnesses (e.g., measles, chickenpox), which may require exclusion from child care.
2. Transmission of infection can be lessened by routine hygienic practices for control of respiratory infections, which include hand washing and disposal of facial tissues containing respiratory secretions.
3. People with particular concerns about contracting Fifth Disease (e.g., pregnant women) should consult their healthcare providers.

## **Who should be excluded?**

1. Children with Fifth Disease **MAY** attend day care or school, as they are not contagious after onset of rash.
2. Routine exclusion of pregnant women from the workplace where Fifth Disease is occurring is not recommended.

## **Reportable?**

No, Fifth Disease is not reportable by New Hampshire law. However, Bureau public health nurses are available for consultation.